

Amendments of the Claims:

A detailed listing of all claims in the application is presented below. This listing of claims will replace all prior versions, and listings, of claims in the application. All claims being currently amended are submitted with markings to indicate the changes that have been made relative to immediate prior version of the claims. The changes in any amended claim are being shown by strikethrough (for deleted matter) or underlined (for added matter).

1. (Currently amended): A locking device for maintaining a fixed angular relationship between a driving shaft and a driven shaft, the locking device being adapted to be used in an internal combustion engine, the locking device comprising:

a variable camshaft timing phaser having a center mounted spool valve, wherein a null position is hydraulically controlled, the phaser having a plurality of angular relationships;

an electro-magnetic locking mechanism, wherein within a predetermined range of rotation along any segment of the whole 360° circumference of the phaser any point therein is disposed to be the locking position, thereby when the locking device is disengaged the fixed angular relationship is maintained;
and

a locking plate interposed between the phaser and the locking mechanism.

2. (Original): The locking device of claim 1 further comprising a second plate rotably coupled the locking plate during an unlock state.

3. (Original): The locking device of claim 1 further comprising a strap drive interposed between the phaser and the locking plate for biasing the locking device toward the electro-magnetic locking mechanism.

4. (Original): The locking device of claim 1 further comprising a stopping element for preventing the locking plate from direct contact with the electro-magnetic locking mechanism.

5. (Original): The locking device of claim 1, wherein the electro-magnetic locking mechanism comprising a coil.
6. (Original): The locking device of claim 1, wherein the angular relationships include the angular relationship between a cam shaft and the crank shaft, or two cam shafts.
7. (Original): The locking device of claim 1, wherein the driven shaft is a cam shaft.
8. (Original): The locking device of claim 1, wherein the driving shaft is a crank shaft.
9. (Original): The locking device of claim 1, wherein the driving shaft is a cam shaft.